Docket No.

279414US0PCT

MAIL STOP PCT

IAPS RSC'O PCT/PTO 10 FEB 200PCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

Toru OKAYAMA, et al.

SERIAL NO:

10/553,982

GAU:

FILED:

October 20, 2005

EXAMINER:

FOR:

FIVE-MEMBERED HETEROCYCLIC DERIVATIVE

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- Attached is a list of applicant's pending application(s), published application(s) or issued patent(s) which may be related to the present application. In accordance with the waiver of 37 CFR 1.98 dated September 21, 2004, copies of the cited pending applications are not provided. Cited published and/or issued patents, if any, are listed on the attached PTO form 1449.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- □ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number <u>15-0030</u>. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Norman F. Oblon

Registration No. 24,618

Surinder Sachar

Registration No. 34,423

Customer Number

22850

Tel. (703) 413-3000 Fax. (703) 413-2220 (OSMMN 05/03)

22....20

FEB 1 0 2006 SHEET 1 OF 3
SERIAL NO.
10/553,982

GROUP

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO. 279414US0PCT

APPLICANT

LIST OF REFERENCES CITED BY APPLICANT

Form PTO 1449 (Modified)

Toru OKAYAMA, et al.

FILING DATE

October 20, 2005

U.S. PATENT DOCUMENTS

				0.0.1 A.L D000				
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE	
1	AA	6 306 883	10/23/01	ADAMS et al. (equivalent of WO 95 31451 –English abstract only)				
	AB	5 462 960	10/31/95	BARTH et al.				
			F	OREIGN PATENT DOCUMENTS				
		DOCUMENT	DATE	COUNTRY			TRANSLATION	
		NUMBER	DAIL			YES	NO	
88800000	AC	2586713	12/05/96	JP (equivalent of EP 0 418 845- English abstract only)			NO	
	AD	97 29774	08/21/97	WO (English abstract only)			NO	

99999	AC	2586713	12/05/96	only)	l NO	0
	AD	97 29774	08/21/97	WO (English abstract only)	NO	0
2000	AE	01 16132	03/08/01	WO (English abstract only)	NO	0
000	AF	2004 065374	08/05/04	WO (English abstract only)	NO	0
000	AG	2004 099130	11/18/04	WO (English abstract only)	NO	0
0000	АН	03/027076	04/03/03	WO (English abstract only)	NO	0
000	Al	96 03388	02/08/96	WO (English abstract only)	NO	0
00000	AJ	00 69848	11/23/00	WO (English abstract only)	N	0
000000	AK	2 83373	03/23/90	JP (with English abstract)	NO	0
00000	AL	92 20651	11/26/92	WO (English abstract only)	N	0
	AM	94 27597	12/08/94	WO (English abstract only)	NO	0
	AN	93 14082	07/22/93	WO (English abstract only)	NO	0
	AO	03 040110	05/15/03	WO (English abstract only)	NO	0
	AP	6 73014	03/15/94	JP (with English abstract & equivalent of EP 0 576 357)	NO	0
88888	AQ	95 15316	06/08/95	WO (English abstract only)	NO	0
0000	AR	98 56377	12/17/98	WO (English abstract only)	NO	0
000000	AS	1 142 889	10/10/01	EP (English abstract only)	NO	0
00000	AT	1 104 758	06/06/01	EP (English abstract only)	NO	0
-	AU	01 40214	06/07/01	WO (English abstract only)	NO	0
	AV	98 52937	11/26/98	WO (English abstract only)	NO	0
00000	AW	98 52941	11/26/98	WO (English abstract only)	NO	0
9000	AX	01 87880	11/22/01	WO (English abstract only)	NO	0
	AY	98 52940	11/26/98	WO (English abstract only)	No	0
0000	AZ	99 58523	11/18/99	WO (English abstract only)	N	0
, , , , , , , , , , , , , , , , , , ,	ААА	50 121269	09/23/75	JP (English abstract only & equivalent of GB 1 490 771)	No	0
000000	AAB	03 027370	02/05/91	JP (English abstract only & equivalent of EP 0 377 457 –English abstract only)	No	0
888888	AAC	2004 060367	07/22/04	WO (English abstract only)	NO.	0
V	AAD	11 193281	07/21/99	JP (English abstract only & equivalent of WO 99 21555 –English abstract only)	No	0
W	AAE	00 63294	10/26/00	WO (English abstract only)	NO.	0

Additional References sheet(s) attached

/Kristin Bianchi/

Examiner

Date Considered 10/09/2008

^{*}Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FEB 1 0 2006

SHEET 2 OF 3

TRADEAL ATTY DOCKET NO. SERIAL NO. U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE Form PTO 1449 (Modified) 279414US0PCT 10/553,982 APPLICANT LIST OF REFERENCES CITED BY APPLICANT Toru OKAYAMA, et al. **GROUP** FILING DATE October 20, 2005 OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) Antiplatelet Trialists' Collaboration, "Collaborative overview of randomised trials of antiplatelet therapy- I: Prevention of 7K.B./ death, myocardial infarction, and stroke by prolonged antiplatelet therapy in various categories of patients", BMJ, vol. 308, AAF pages 81-106 1994 DERRY et al. "Risk of gastrointestinal haemorrhage with long term use of aspirin: meta-analysis", BMJ, vol. 321, pages 1183-1187 AAG 2000 CATELLA-LAWSON. "Vascular biology of thrombosis: Platelet-vessel wall interactions and aspirin effects", Neurology, vol. 57, Suppl. 2, pages S5-S7 AAH 2001 PAIRET et al. "Measurement of Differential Inhibition of COX-1 and COX-2 and the Pharmacology of Selective Inhibitors, Drugs of Today, vol. 35, no. 4-5, pages 251-265 AAI 1999 TSUJI et al. "Studies on Anti-Inflammatory Agents. IV. Synthesis and Pharmacological Properties of 1,5-Diarylpyrazoles and Related Derivatives", Chem. Pharm. Bull., vol. 45, no. 6, pages 987-995 TANAKA et al. "Antiplatelet Agents Based on Cyclooxygenase Inhibition without Ulcerogenesis. Evaluation and Synthesis of 4.5-Bis(4-methoxyphenyl)-2-substituted-thiazoles", J. Med. Chem., vol. 37, pages 1189-1199 AAK MEANWELL et al. "Nonprostanoid Prostacyclin Mimetics. 3. Structural Variations of the Diphenyl Heterocycle Moiety", J. Med. Chem., vol. 35, pages 3498-3512 AAL 1992 MEANWELL et al. "Nonprostanoid Prostacyclin Mimetics. 2. 4,5-Diphenyloxazole Derivatives", J. Med. Chem., vol. 3483-3497 AAM 1992 MEANWELL et al. "Nonprostanoid Prostacyclin Mimetics. 5. Structure-Activity Relationships Associated with [3-[4-(4,5-Diphenyl-2-oxazolyl)-5-oxazolyl]phenoxy]acetic Acid", J. Med. Chem., vol. 36, pages 3884-3903 AAN MEANWELL et al. "Nonprostanoid Prostacyclin Mimetics. 4. Derivatives of 2-[3-[2-(4,5-Diphenyl-2oxazolyl)ethyl]phenoxy]acetic Acid Substituted alpha to the Oxazole Ring", J. Med. Chem., vol. 36, pages 3871-3883 AAO SEILER et al. "2-[3-[2-(4,5-Diphenyl-2-Oxazolyl) Ethyl] Phenoxy] Acetic Acid (BMY 42393): A New, Structurally-Novel Prostacyclin Partial Agonist: 1) Inhibition of Platelet Aggregation and Mechanism of Action", Thrombosis Research, vol. 74, AAP no. 2, pages 115-123 1994 MEANWELL et al. "Non-Prostanoid Prostacyclin Mimetics. 6. Derivatives of 2-[3-[2-(4,5-Diphenyl-2-Oxazolyl)Ethyl]Phenoxy]Acetic Acid Modified beta-to the Oxazole Ring", Drug Design and Discovery, vol. 11, pages 73-89 "JTE-522: Antiinflammatory Cyclooxygenase-2 Inhibitor", Drugs of the Future, vol. 23, no. 6, pages 598-601 1998 AAR TANAKA et al. "Studies on Anti-platelet Agents. V. Synthesis and Structure-Activity Relationship of 3-Substituted 5,6-Bis(4methoxyphenyl)-1,2,4-triazines", Chem. Pharm. Bull., vol. 42, no. 9, pages 1835-1840 **AAS** 1994 PENNING et al. "Synthesis and Biological Evaluation of the 1,5-Diarylpyrazole Class of Cyclooxygenase-2 Inhibitors: Identification of 4-[5-(4-Methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide (SC-58635, Celecoxib)", J. ΔΑΤ Med. Chem., vol. 40, pages 1347-1365 LAN et al. "Structure-Activity Relationships of Pyrazole Derivatives as Cannabinoid Receptor Antagonists", J. Med. Chem., vol. 42, pages 769-776 AAU 1999 TAKAHASHI et al. "FR167653, a p38 Mitogen-Activated Protein Kinase Inhibitor, Prevents Helicobacter pylori-induced Gastritis in Mongolian Gerbils", Journal of Pharmacology and Experimental Therapeutics, vol. 296, no. 1, pages 48-56 Examiner **Date Considered** /Kristin Bianchi/ 10/09/2008 *Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FEB 1 U 2006 W SHEET 3 OF 3

ATTY DOCKET NO. SERIAL NO. U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE Form PTO 1449 (Modified) 279414US0PCT 10/553.982 **APPLICANT** LIST OF REFERENCES CITED BY APPLICANT Toru OKAYAMA, et al. GROUP FILING DATE October 20, 2005 OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) DOHI et al. "The anti-platelet actions of FR122047, a novel cyclooxygenase inhibitor", European Journal of Pharmacology, /K.B./ vol. 243, pages 179-184 AAW 1993 OCHI et al. "The analgesic effect profile of FR 122047, a selective cyclooxygenase-1 inhibitor, in chemical nociceptive models", European Journal of Pharmacology, vol. 391, pages 49-54 "KBT-3022: Platelet Antiaggregatory Cyclooxygenase Inhibitor", Drugs of the Future, vol. 16, no. 2, pages 105-107 AAY 1991 Drugs of the Future, vol. 26, no. 2, page 197 AAZ RYNBRANDT et al. "Synthesis and Platelet Aggregation Inhibitory Activity of 4,5-Bis(aryl)-2-substituted-thiazoles", J. Med. Chem., vol. 24, pages 1507-1510 BAA 1981 TANEMOTO et al. "Clinical Study of KBT-3022: Platelet Aggregation Effects and Pharmacokinetics in Elderly (>65 Years of Age) and Nonelderly Patients with Chronic Arterial Occlusion", Current Therapeutic Research, vol. 61, no. 12, pages 891-BAB 900 2000 INOUE et al. "Synthesis and Antiplatelet Activity of 2-Amino-4,5-diphenylthiazole Derivatives", Yakugaku Zasshi, vol. 115, no. 8, pages 603-610, with English abstract 1995 TANAKA et al. "Studies on Anti-platelet Agents. IV. A Series of 2-Substituted 4,5-Bis(4-methoxyphenyl)pyrimidines as Novel Anti-platelet Agents", Chem. Pharm. Bull., vol. 42, no. 9, pages 1828-1834 BAD DANNHARDT et al. "Cyclooxygenase inhibitors - current status and future prospects", Eur. J. Med. Chem., vol. 36, pages 109-126 2001 HAWKEY. "COX-2 Inhibitors", The Lancet, vol. 353, pages 307-314 1999 **BAF** BAG **BAH** BAI BAJ **BAK** BAL BAK 10/09/2008 **Date Considered** Examiner /Kristin Bianchi/ *Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

U.S. PCT Application Serial No: 10/553,982

Filed: October 20, 2005 Toru OKAYAMA, et al. Docket No. 279414US0PCT

STATEMENT OF RELEVANCY

- 1) References have been cited in the International Search Report. A copy of these references is being submitted herewith.
- 2) References have been cited in the corresponding Search Report. A copy of these references is being submitted herewith.
- 3) References AC, AD, AAF-AAK are discussed in the specification. A copy of these references is being submitted herewith.
- 4) References AA, AB, AE-AAE, AAL-BAF are additional prior art known to Applicant. A copy of these references is being submitted herewith.



Docket No.: 279414US0PCT

Serial No.: 10/553,982

Inventor: Toru OKAYAMA, et al.

LIST OF RELATED CASES CITED BY APPLICANT UNDER 37 CFR 1.56

Filing Date: October 20, 2005

Group:

LIST OF RELATED CASES

Examiner Initial /K.B./ /K.B./	Docket No.	Serial or Patent Number	Filing or Issue Date	Patent App. Publication No.	Inventor or Applicant	
	279414US0PCT*	10/553,982	10/20/05		OKAYAMA, et al.	
	275332US0PCT	10/543,915	07/29/05		KANAYA, et al.	

Examiner

/Kristin Bianchi/

Date Considered

10/09/2008

*Present Application; listed for information NFO/hah